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BULBS FOR POTS

B

AND FALL PLANTING IN THE GARDEN



A CATALOG OF THE BULBS AND PLANTS OF THE AMARYLLIS, IRIS,
ORCHID, GESNERIA AND OTHER PLANT FAMILIES
AND MANUAL OF THEIR CULTURE

AFRICAN VIOLETS

Many Reduced Prices. New Items Listed. Complete Culture Directions.
A Personal Letter,—to You.

FALL 1962



CECIL HOUDYSHELE

1412 Third St.

La Verne, Calif.

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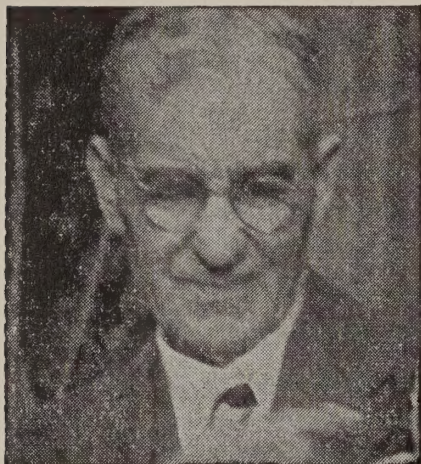
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A PERSONAL LETTER — TO YOU

Dear Floral Friends,

You have often heard the old quotation, "Backward Oh Backward oh time in thy flight, make me a boy again, just for tonight." But time never moves backward. It always moves forward. Time and material have always existed. There is an old saying, one cannot make a silk purse out of a sow's ear, nor can one make something out of nothing.



Cecil Houdyshel

The conclusion is that the material now existing has always existed, not necessarily as a solid. Probably all material now existing—even that of our own bodies—was once in the form of a gas.

To gardening. We have Tulip species listed this year, more varieties of Christmas Cactus, we usually have twenty or more varieties, too many to list. Our list of Amaryllis is longer, some are in small quantities. Orders are filled in order received so order early when possible. The species *A. striata* var. *fulgida* flower from very small bulbs.

Visitors are welcome. Take San Bernardino Freeway from west to La Verne sign (Fair Grounds), follow street to Fair Grounds, turn left, follow street to La Verne, turn left on 3rd St. to 1412. Or you may take Arrow Highway thru San Dimas (Bonita St.) to La Verne, turn right one block to 3rd St. If coming from the east, leave Freeway at Towne (Pomona), turn right short block to La Verne St., left to La Verne.

Sincerely,

CECIL HOUDYSHEL

TERMS AND INSTRUCTIONS FOR ORDERING

Prices in this catalog cancel all former prices. They are for one bulb unless otherwise stated. 12 bulbs are sold for price of 10 or 6 for price of 5. 100 bulbs for price of 70 unless noted. Books, garden supplies and plants take no quantity discounts. California customers must add 4% Sales Tax.

Remit in advance, in full, by check or M.O. No C.O.D. No charge accounts carried. Nothing reserved unless paid for in full. These terms reduce our expenses and lower the cost to you. 1, 2 or 3 cent stamps are accepted for small sums—under \$1.00.

Insurance up to \$10.00, 10c. \$10.00 to \$50.00, 20c. Postal insurance covers all except freezing in transit. **Special Handling** costs 25c up to 2 lbs.; 2 to 10 lbs., 35c. **Special Delivery** is better as it also speeds delivery and is handled more carefully. We are not responsible if plants are not immediately taken indoors. Up to 2 lbs. costs 45c. 2 to 10 lbs., 55c. Over 10 lbs., 70c. Each fee is for one package only.

Wholesale. There are several items we can supply wholesale. Send your want list and we will quote our best quantity prices. We can quote African Violets to dealers only.

Partial Shipments are made if bulbs are not all dormant at same time. We deliver

everything within the season for correct planting. We must collect from you the fees for Insurance, Special Handling, Special Delivery.

We guarantee our bulbs to be true to name and healthy and replace them if not.

Postage rates. With postage so high we find we must ask for postage. If you want to enclose the carriage charges with your order you may add 10% of the order with minimum of 50c, in which case there will be no additional charges for postage, nor will there be any refund. This applies unless otherwise stated. If wanted by airmail it must be at your expense. Or we will send Express collect for carriage.

Catalogs. Spring Catalog mailed Jan. 1; Fall Catalog, Aug. 15, or soon after.

General Culture Directions

Rich sandy loam is the best soil. But if too sandy, it may lack fertility. It will require more rainfall or irrigation. The ideal garden soil will contain sand, clay and humus.

All soils require the addition of much humus. Compost all garbage, weeds, leaves, cut branches and manures. When rotted, add to soil and thoroly mix.

Fertilizer. We recommend only animal manures, compost and commercial fertilizers that are mostly of organic origin such as **Spoonit** and **Blue Whale**, listed in this catalog. In the outside garden fresh manure can be used on most plants that are growing vigorously as a very light mulch, but after flowering. Too much fertilizer before flowering may almost or wholly stop the flowers. When the growth of a plant becomes abnormally rapid it is unlikely to flower or produce fruits.

Do not fertilize a plant in dry soil, or use manure (unless thoroly rotted in a compost heap) in the soil before planting bulbs, seeds or plants. Water lawns, trees, and plants well the day before applying fertilizer and again a few days after application. Do not fertilize a sick plant in order to make it well. You are more likely to make it worse or even kill it. Small plants and seedlings should not have too much either. Lush, rapid growth may be weak and "flabby." Sturdy growth with firm structure is better. Little and often is the best rule for fertilizing.

Compare plants with people. Both are living, organic beings. Air, water and food are necessary for their growth and health. But one does not give babies beefsteak, fried potatoes, apple pie and a cup of coffee. Nor is this a good diet for an invalid or an ill person, however good it may be for one in vigorous health who performs hard physical labor. Nor should plants be over-fed or fed at all if sick of thirsty. But since one cannot add much rich food when potting a bulb, very good results may be obtained by a monthly feeding of very weak liquid manure, color or very weak tea. A more convenient way is to use Spoonit, which we list under Garden Supplies.

After blooming, many neglect their bulbs. As a result the bulbs do not flower the following year. For success one must continue to give good culture. This is the time to fertilize, irrigate and cultivate frequently, until yellowing foliage indicates the bulb is becoming dormant. During this growth period next year's flower buds are formed.

Depth of planting and distance apart often cause too much concern. Bulbs usually have sufficient adaptability to do well under widely varying conditions. If left in one place a few years, most bulbs adjust themselves to their preferred depth. Approximately, bulbs should be about 2 or 3 times their diameter apart unless their habit of growth is spreading—like *Ranunculus*. In such cases plant farther apart. Bulbs as large as Daffodils may be 4" to 6" deep. Bulbs with a heavy erect stem need deep planting in order to remain erect. Plant deeper in light sandy soil than in heavy soils and in cold climates to protect them from frost. A winter mulch will help protect.

Pests. Snails, slugs, ants, mealy bugs, thrips, aphids, leaf hoppers, mites, red spider and scale are among the most serious pests in the garden or on house and greenhouse plants. They must be controlled. See our listing of **Insecticides** under **Garden Supplies**.

Acid and Alkaline Soils. Most plants thrive in mildly acid, neutral or mildly alkaline

soils. But others do not have so wide a range of tolerance. Rhododendrons, Azaleas, Camellias, Gardenias, Zantedeschias, Caladiums (and other members of Arum family), Nerines, Haemanthus, Gloxinias, Begonias, Orchids and most shade loving plants require an acid soil. Some like Gladiolus prefer mildly acid to neutral soils; Bearded Iris do best in neutral to alkaline soils. The acid-alkali balance depends upon the concentration of hydrogen ions in a saturated solution. This is expressed in pH units. pH7 is neutral. Below that the acidity increases: above it the alkalinity increases. For the mathematical, I will explain that the numeral is the negative logarithm denoting the concentration of hydrogen ions in gram atoms per liter.

In regions having heavy rainfall, excess alkali is usually dissolved and carried away by the runoff. Semi-arid regions usually have alkaline soils. Calif. soils usually have too much unless cover crops or applications of humus, which are acid, have lowered the pH. Some Texas soils are too alkaline. The remedy is obvious. Apply humus, ground phosphate rock, or small, even applications of sulphur. Improve the drainage.

Chlorosis of plants, indicated by lighter green streaks of foliage, may not be due to a virus disease, in all cases. It may indicate lack of all required nutrients, some of which cannot go into solution in an alkaline medium. Among such nutrients are Nitrogen and Iron which are soluble only in acids. Mild acidity is usually best. Iron Chelate in minute quantities often corrects chlorosis. Be careful. It burns if too strong. Iron Chelate is now added to Spoonit.

Potting Directions. Use clean pots of the right size, neither too large nor too small. A 2½" Amaryllis, for example, needs a 6" pot. A 1½" Eucharis needs a 5" pot. Small bulbs like Ranunculus or Achimenes may have 3 to 5 in a 5" or 6" pot. Cover the hole at bottom with a piece of broken pot, concave side down. Above this place a handful of sphagnum moss to prevent the soil from sifting into and clogging the drainage material.

The drainage must be perfect and it is essential that the soil above this drainage be of a friable texture that permits water to pass thru freely. Only sandy soil will answer this purpose. Add enough sand so that it feels very gritty. The potting soil we like best is about 2 parts of peat or leaf mould and 1 of sand. If peat is used a little woods earth or pure rotted leaves and twigs may be added. Plain dirt, especially if clay is present, or any mixture that becomes lumpy when dry is likely to produce poor results. Mulch surface with wet sphagnum to prevent erosion when watering and too rapid drying at surface. Special directions are given for certain plants with the listing.

GARDEN REFERENCE BOOKS

Bailey's Cyclopedia of Horticulture. This 3-vol. set of over 3,600 pages describes almost every cultivated plant and has a wealth of culture information. Price \$52.00.

Hortus Second (Bailey). A concise Dictionary of Gardening. This 778-page volume lists and describes nearly every plant offered in catalogs; and some that are not in the Cyclopedia of Hort. It contains a few culture hints. Price \$13.50.

Amaryllis and How to Grow Them, by Peggy Schulz. This book was written for amateurs and by a well known amateur. It contains much useful information. 128 pages, many line drawings, photographs and two colored plates. \$2.95.

Bulb Magic In Your Window. 100 bulbs to grow in your window, from Achimenes to Zephyranthes. 214 pages. 3 color plates and 42 full page illustrations. Complete growing instructions. \$3.95.

House Plants for Every Window, by Dorothy H. Jenkins and Helen Van Pelt Wilson. Formerly *Enjoy Your House Plants*. An up-to-the-minute revision of "the most popular book on house plants ever written." Covers many plants for the window garden. A must for the Window Gardener. \$3.50.

African Violets, Gloxinias, and their relatives. A guide to the cultivated Gesneriads by Harold E. Moore, Jr. 5 color plates and more than 40 line drawings, illustrating nearly

every species described, have been expertly prepared by Marion Ruff Sheehan to help the grower identify his plants. Never before has this ornamental family been so completely and artistically depicted. \$10.00.

The New Greenhouse Gardening for Everyone, Ernest Chabot. Important factors are noted, including correct temperatures for forcing plants, bulbs, and orchids. \$4.75.

How to Grow Rare Greenhouse Plants. A new book on greenhouse gardening by Ernest Chabot. Complete directions for greenhouse culture of 260 rare plants. Everyone having a greenhouse should have both books. 182 pages. Illustrated. \$4.00.

Geraniums, Pelargoniums, by Helen Van Pelt Wilson. 248 pages, 7 color plates, many drawings and illustrations. Best book on this subject. \$4.50.

Gloxinias, and How to Grow Them, by Peggy Schulz. Illustrated by colored plates and line drawings. Many Gloxinia relatives discussed, 128 pages. \$3.50.

Growing Plants Under Artificial Lights, by Peggy Schulz. 146 pages. One color plate and many illustrations. \$3.75.

Tuberous Begonias, by Worth Brown. Mr. Brown is one of our most important hybridizers and wholesale growers. His book is a complete guide for the successful growing and propagation, outdoors or as house plants. 128 pages, illustrated. \$3.50.

How to Grow African Violets, by Carolyn Rector. 64 pages, paper-board covers. Illustrated. How to grow from seed, prepare potting soils, pollinate and hybridize, control pests, diseases, groom plants for show and grow from leaf cuttings. New addition, \$1.75.

The Little Bulbs, by Elizabeth Lawrence. Learn the charm of growing little bulbs. Miss Lawrence is a dedicated gardener. She won the Herbert Medal for her book "A Southern Garden" in 1943. \$4.00.

How to Grow Orchids, by Cecil Houdyshel. This booklet has recently been revised and is now 12 pages (formerly only 10 pages). Price 50c.

Amaryllis Manual, by Hamilton P. Traub. Dr. Traub, editor of Plant Life, has long been regarded as a world authority on the botany and cultivation of the Amaryllis. Culture, ornamental uses, and many forms of the species are treated in detail in this first complete and scientific work. Accompanying appendices provide the botanist with all the information he requires for a thorough knowledge of this important group of flowers. Illustrated. \$7.50.

Camellia Culture, edited by E. C. Tourje. A compendium of the latest scientific practices described from their own experience by 55 of the country's leading research workers lists and describes nearly every plant offered in catalogs, and some that are not in the Cyclopedia of Hort. It contains a few culture hints. Price \$13.50.

Garden Supplies

Postage Extra is necessary on several items below. The weight when packed is given on these items. It is clearly stated that you must send the postage when you order. Here is how to find it. We are very near Los Angeles. Call your P.O. and ask the cost of postage on the packed weight given from your P.O. to Los Angeles and send us that amount. Orchids that are shipped in pots or baskets are sent by express f.o.b. The minimum cost is \$2.36.

Spoonit is recommended for African Violets and all house plants or in the garden. Analysis: nitrogen, 18%; phosphoric acid, 20%; potash, 16%; chelated iron. To use, dissolve level tablespoonful in 1 gallon water or level teaspoonful in quart. Apply every 3 or 4 weeks. Transplants half strength. It never burns. Prices: 6 oz. package 60c plus 11c postage. 15 oz. pkg., \$1.25, plus postage on 2 lb. (See paragraph 1 above.) 2½ lb. pkg., \$2.50 plus postage on 3 lbs. Try the new **Orchid Spoonit**, 1 lb. \$1.25 plus postage on two lbs. Spoonit can be furnished in a 5 lb. drum for \$4.50, f.o.b., 10 lbs. \$8.00, f.o.b.

Blue Whale. 14 oz. liquid Blue Whale, 1.25 postpaid. Sea Rich, Blue Whale Peat

Moss, Bantam bag (approximately 10 lbs.) \$3.25 prepaid. We have Blue Whale liquids in several sizes as well as the Peat Moss, at the nursery. No. 2 Bag of Blue Whale \$1.00 postpaid. **Blue Whale Planter Mix.** Based on The University of California mix Formula No. 5. 400 Cubic Inches. 89c plus postage for 3 lbs.

We recommend the use of both Blue Whale peat and the Liquid Fertilizer. Our potting mix is made up with $\frac{1}{2}$ Compost, $\frac{1}{4}$ Blue Whale peat, $\frac{1}{4}$ washed sand, and enough Sponge Rok to give it good drainage.

Write to Lue Hale, The Friendly Gardener, Acme Peat Products of Canada, 687 No. 7 Road, Dept. E, Richmond, B. C., for the African Violet Flyer and for the Foliar Feeding Suggestions.

Flower Pot Tree Stand, black, sturdy, with saucers to hold 13 pots. \$8.75. Black stand to hold 18 pots, \$12.50. Brass, \$14.75, f.o.b. by express.

Plastic Pots. 2 $\frac{1}{4}$ " starter pots 25c doz. \$2.00/100. 3", 50c doz. 100/\$4.00. Plus postage.

N.P.I. A new planter mix. 150 cubic inches, 59c, postage for 2 lbs. 600 cubic inches, \$1.59, postage for 4 lbs. A Nutrilite product.

Sphagnum Moss. Best we can get. 70c per lb. gross weight. Postage extra, for 1 lb.

Plant Labels. The following are plastic labels, easily written upon with pencil. **Pot Labels**, length 4 $\frac{1}{2}$ ", 35c doz. Length 3 $\frac{1}{2}$ ", 30c doz. 100, \$1.00. Small labels for **African Violets**, 2" long, 20c doz. 75c for 100. **Orchid Labels.** Perforated on one end, but without wire or cord, 2 $\frac{1}{2}$ ", 30c doz. **Aluminum Tree Labels.** Emboss name on label with sharp pencil or ball point pen. Two sheets of aluminum make this strong and permanent, with wire to tie on, 35c doz. Package of 50, \$1.00 prepaid.

Wire Baskets. Our wire baskets are electrically welded, galvanized, non-rusting. The best obtainable. They look better, last longer than painted, soldered baskets and cost but little more. Price, with hangers, 8", \$1.00 ea., \$11/doz. 10", \$1.25 each., \$13.50/doz., postpaid.

Snap On Pot Hangers, for hanging any size pot. Galvanized. 35c ea. Send 10c ea. for postage. \$4.00/doz.

CATALOG ARRANGEMENT

is by Plant Families, according to their relationship.

In the following lists the **genus** (plu. **genera**) is mentioned first. After it, the **species** (plu. also **species**) or horticultural variety is named. The initial of the genus is used for the second and succeeding species. Thus **A.** will stand for **Amaryllis** or **Agapanthus** depending on the genus last named in full.

THE AMARYLLIS FAMILY — Amaryllidaceae

This Family includes the following bulbs, **Agapanthus** thru **Zephyranthes**.

Agapanthus, Blue Lily of the Nile. They flower here in June to Aug. In the north they must be grown in large pots or tubs and wintered in a frost free room. Plant in full sun exposure in any good sandy garden soil that drains well.

A. orientalis. Dark blue. Larger than longispathus. Superior clone. \$1.00.

A. orientalis. Sky, Blue. 75c.

A. orientalis. Dwarf blue. \$1.25 each.

Amarcrinum Howardi. Bigeneric hybrid of **Brunsvigia rosea** and **Crinum moorei**. Beautiful, fragrant, pure pink fls. Fall bloomer. Culture like **Crinums**. Hardy to So. Indiana. Large bulbs. \$2.50 and \$1.25. Special, small \$1.00.

A. Dorothy Hannibal, a Les Hannibal origination. Like *Crinum Cecil Houdyshel* it flowers in all seasons. The flowers are a very pretty pink. New low price. \$4.00.

Amaryllis are the easiest, the most showy and popular of all bulbs for growing in pots. Equally desirable for southern gardens where they are hardy along the east coast to N. Car. and on the west to Vancouver. In the middle section they may be grown as far north as Ark. and Okla., but note special directions for colder sections.

How to Grow Amaryllis. In the garden, in the deep south where temperatures go only a few degrees under freezing, Amaryllis bulbs need to be covered only about an inch or two. Farther north they may be planted deeper in protected places and mulched with straw, leaves and/or brush. In Okla., a customer reports a depth of 4" with mulch is safe. Amaryllis must not be planted close to trees, shrubs or large vigorous plants, whose roots complete and take the moisture. Irrigate frequently. Rain is seldom enough. The most common error is lack of sufficient moisture. They are endemic to the tropics and in many cases, where there is almost daily rain. The soil should contain much humus. Add well rotted manure and if not slightly acid, add some peat but do not acidify the soil with sulphur or aluminum sulphate.

In Pots. A 2½" bulb requires a 6" pot. Give a 3" to 3½" bulb a 7" pot. Remove dead roots but every vestige of living root should be left on. Our best success in flowering Amaryllis and in growing them on to larger, better bulbs, is in a soil mixture composed of clean, sharp sand one part by volume and a mixture of pure organic material two or three parts. The latter may be pure peat or about half peat and half well broken up or decayed leaf mould, woods earth or completely reduced compost. The final mixture should have enough sand to feel very gritty. Such a mixture drains quickly but retains enough moisture around the roots.

To this mixture we add a tablespoon of bone meal and a level teaspoon of blood meal for each 6" pot. This is enough fertilizer until after bulbs have flowered.

The neck and about ½ of bulb should be above soil surface. This surface should be ½" below pot rim. In potting carefully spread out all living roots as they are a great advantage to bulbs. Such bulbs will start more quickly and may be given a warm temperature at once. If there are few or no living roots on bulbs, set them first in a cool place, about 50°, for roots to form and growth start.

We water at once and again when growth has started. With mixture above advised, one is not likely to over water tho you should be a little careful at first, if the bulb had no living roots. For as long as they will grow, potted Amaryllis need frequent watering. They are not only heavy drinkers but gross feeders. If you give liquid manure or Spoonit every 3 weeks, it will be about right. It is also good to vary the diet. Try Blue Whale.

Amaryllis like the sun. If the foliage fades the sun may be too strong or you may not be watering enough. In the house, give them a sunny window. Keep the bulbs growing vigorously until fall, Oct. or Nov. When outer leaves begin to go down, buds have been formed for next season's flowers and bulbs may be dried off and stored in a cool place. Inspect frequently. For early flowers, dry off about Nov. 1, or earlier.

A. bifida. Formerly known as *A. advena*. **Ox-blood Lily.** This is a fall bloomer. Hardy to So. Ind., Ill., Mo., Kansas, etc. There are 5 to 8 dark red fls. in an umbel. Sam Caldwell of Tennessee says these bulbs make a fine pot plant. Special, 35c ea. 3/\$1.00. \$3.50 doz. Smaller blooming size, \$12.50 per 100. f.o.b.

Dutch Hybrid Amaryllis. We have a fine selection this year at new low prices. Some of these are in small quantities so order early. Orders will be filled in order received. Some are jumbo size, others are small bulbs. They all should flower. We have quite a number that labels have been lost. These are priced at a low price, our selection only. No descriptions on these. Bulbs will be sent in November or as soon as ready.

Albino. Pure white, a little green in the throat, large flat flowers. \$6.50.

American Express. Rich oriental-red. Easy to grow and flower. \$4.00.

Charlemagne. Purplish red, very large flowers, a real giant. \$6.00.

Doris Lillian. Deep carmine rose. Perfect contour. A beauty. Small bulbs \$3.50.
Faust. Shiny Dutch vermilion, a little darker in the throat. Small \$2.00.
Friendship. Salmon with a slight orange flower. 4 to 5 fls. per stem. \$6.00.
Giant Goliath. Deep vermilion, enormous flat faced and star shaped fls. \$6.00.
Hellas. Light brick red with large white center. Free flowering, \$5.00.
King Gustav VI Adolf. Bright red. Very tall strong stems bearing 4 enormous fls. \$6.00.

Lucifer. Very dark red, fine contour and large size. \$5.00. Sm. \$1.50.

Moreno. 8" fls. Unusual color, light wine red, tinted rose in throat. Sm. \$1.50.

Pink Favorite hybrids. \$3.50.

Queen of the Whites. We have a very few small bulbs for \$1.50.

Queen Page x Alcyone. Our cross. \$1.00 each.

Queen Page hybrids. Lovely shaped flowers salmon in color. \$3.50.

Queen Superior. Excellent dark red. Large flat flowers. Free Flowering. \$5.00.

Roslinde. 7" nicely rounded fls. of carmine rose pink, lighter in throat. \$4.00.

Salmonetta. Bright salmon-pink, shaded orange in throat. \$3.00.

Sweet 17 hybrids. Salmon rose pink \$2.00. Small.

Van Tubergen Pink hybrids. Our seedlings. \$1.50.

Violetta our hybrids. \$1.00 small bulbs.

Dutch hybrids. We have a number of these, labels were lost. \$1.50 each. 6 for \$7.75. 12 for \$14.00.

We have a number of **pinks** in too small numbers to list. Our selections \$4.00.

D. and R. Dutch Hybrids. These are unnamed except for the color. 3½"—up in size. White, Pink, Orange, Dark Red, Salmon. \$4.00 each. One of each color, value \$20.00 for \$18.00.

A. striata var. fulgida. Species. Exquisite star shaped flowers. Peach red with chartreuse star center. The bulbs are naturally small. \$5.00. We have small bulbs for \$2.00.

Clivias have evergreen, strap-like foliage somewhat resembling that of *Amaryllis*. The orange flowers are produced in umbels of 10 to 25 in March and April.

Culture. They are usually grown in pots, even in the south, as more perfect foliage is thus possible, and when in flower one wants them in the house. We grow them in a lath house, lath spaced ½" apart, and in garden under Avocado (evergreen) trees, directly in the soil as they are often grown in Calif. When grown thus they will make very large clumps. They must have shade with only a few flecks of sunshine, but plenty of light and air.

Clivias must never be dried off or allowed to lose their foliage. Keep them well watered after flowering, all summer and fall. Liquid fertilizer occasionally helps. When growth ceases in late fall rest them by giving them less water. But keep moist enough to prevent wilting of foliage. At this time they should have a cool room with temperatures from above 32° to not much over 50°. Pots should be 6" to 8" for small plants and up to 12" for larger. As they grow and increase, do not divide but shift to larger pots. Drainage must be perfect. Potting soil as described under "General Culture Directions." pH 7 is about right. One cannot guarantee a Clivia to flower the first year after moving tho they usually do.

The foliage of our Clivias, grown outside in the ground will not be as perfect as that of pot grown plants. But when potted, they replace the old foliage in a few months and become specimen plants.

Clivia miniata. Wide open soft yellow orange fls. \$2.75, sm. \$1.00.

C. cyrtanthiflora. The flowers are tubular and long, yet they are so numerous that they fill a large umbel and make a beautiful floral display. They are distinctly different

from other *Clivias* also in their time of flowering. There is not a month in the year when we do not sometimes have flowers. Price \$10.00.

C. European Hybrids. The large flowers have well rounded petals of red-orange and the wide leaves are ornamental. This is the most desirable of all *Clivias*. Selected fine large plants, blooming size, \$6.50.

Crinums. Most *Crinums* are large bulbs and plants tho a few are no larger than an *Amaryllis*. They are very popular in the south and are a common sight in southern gardens. Among trees and shrubs they are indispensable.

Culture. *C. bulbispermum* is hardy in the north, but there it should be planted 6" or more deep and mulched in winter. *Crinums moorei*, Cecil Houdyshel and *Powellii Alba* are equally hardy. *Crinums* may be shipped any time of the year in mild climates.

The ideal situation is among trees and shrubs, in a sandy soil but all except *moorei* can be grown in full sun exposure and in heavier soils. There should always be much leaf mould and peat incorporated in the soil—especially if heavy. The alkaline California soils need the addition of peat for growing *Crinums*. If your *Crinum* foliage becomes blotched with lighter green, as in the case where plants are infected with mosaic disease, the addition of much peat to the soil will lower the pH and probably cure the plants.

Crinums succeed in large pots or tubs but most of them require too much space for house or greenhouse growing. Tubs can be stored over winter and set outside in summer. In the south the bulbs may be planted very shallow. Keep always wet when growing.

C. bulbispermum. We have sold this as "capense," then as "longifolia" but botanists give priority to the present listed name because first given. We have *alba* and *rosea*, 50c. Good blooming size, \$1.00.

C. Cecil Houdyshel. Flowers deep rose pink. One of the best hybrids, all qualities considered. It has the same parents as *C. Powellii*. Instead of flowering only once, like *Powellii*, this hybrid has been known to give 12 or more flower scapes in one year. A large clump will give continuous bloom from spring to fall. It is hardy as far north as Independence, Mo. If planted 8" deep (to bottom of bulb) and heavily mulched over winter it has survived 10° below zero.

Prices reduced. Blooming size, \$1.00. Large, \$2.00. Jumbo bulbs, \$3.00 each. They increase very rapidly and a jumbo size soon makes a large clump.

C. Ellen Bousanquet. Large, glowing, dark wine red flowers. A very beautiful *crinum*. \$1.00 and \$1.50.

C. Elizabeth Traub. Origination of Dr. Traub. It was obtained by crossing *C. scabrum* and *C. Ellen Bousanquet*. The flower color differs a little from the latter and the plant is much more sturdy. It makes offsets more freely. The culture is much easier. Those interested in *Crinum* breeding should try crossing this on *C. Cecil Houdyshel*. The latter makes a few seed and it can be done. \$2.00. Small \$1.00.

C. Erubescens. Milk and Wine Lily. Red purple center stripe on petals. 75c to \$1.50.

C. H. J. Elwes. Pink, very beautiful. Does not make large bulbs. Small plant more suitable for pots. Tender. Med. \$3.50.

C. kirkii. One of the most desirable of "Milk and Wine" type. White flowers with red center stripe. The large umbels have many flowers open at one time. \$1.25.

C. latifolium. This species is usually known in horticulture as *C. yemense*. The pure white flowers are very large and attractive and fittingly adorn an unusually attractive plant in June to July. \$3.00.

C. Moorei. Large pink, bell-shaped flowers in the fall, freely produced. The long neck of the bulb surmounted by rotated leaves gives the plant great decorative value. Requires shade. Nearly as hardy as *bulbispermum*. \$1.00 and \$1.50.

C. Peach Blow. Exquisite large pink flowers. Free flowering from largest bulbs. A valuable hybrid. \$6.50. Probably tender.

C. Powellii alba. Extra fine pure white. One of the most valuable and beautiful Crinums. Small 50c. Good blooming size \$1.00. Largest, \$1.50.

Daffodils belong to the genus *Narcissus* of the *Amaryllis* Family. We have some of the best for you this year. **Culture.** Daffodils are hardy both in the mild climate of the south as well as in the colder northern states. In the north especially it is best to plant the bulbs rather deep where the frost does not reach. Six inches is about right. Sandy loam is the best soil, but any good rich garden soil will do. They will do fine in partial shade of trees altho many are grown in full sun. These are No. 1 size bulbs.

Daffodil Diotima. Huge golden yellow. Largest daffodil there is. 25c ea. \$2.50 doz.

Mount Hood. Huge pure white, wide ruffled cup. 40c ea. \$3.50 doz.

Pink Supreme. White petals with rich pink cup. One of the best pinks. 35c ea. \$3.25 per doz.

Eucharis amazonica (or *Grandiflora*). Eucharist Lily. Star of Bethlehem. First collected on Banks of Rio Magdalena, Colombia, S.A. Thus are combined three Biblical names in the lore of this flower. There are 4 pure white, very fragrant flowers in an umbel with a cup in center. The beautiful evergreen foliage makes this always a decorative plant. We have a few small bulbs probably will not flower this year for \$1.00 each.

Habranthus bloom several times a year and at most any time. Culture like *Amaryllis*. After good growth, if allowed to get rather dry for a period they will usually flower after a good watering. **H. robustus**, pink lavender, 50c ea.

Haemanthus. The Blood Lilies of South Africa. So rare that few have seen them.

Culture. Hardy only in almost frost free climate like So. Calif. or Fla., if temperatures do not go below 24° at night. They do well in pots anywhere. The soil should be as for *Amaryllis*. They should have about half sun exposure. Pot with bulb only lightly covered.

Haemanthus produces red fruits containing seed. The flowers require hand pollination which may be done by rubbing palm of hand over the flower umbel when pollen is ripe. This spreads it to the pistils. Do this frequently as flowers do not all open at one time. Thus many valuable seed may be produced. Do not gather until quite red. When ready to plant, remove outer pulp and plant by pressing seed down slightly into soil but do not cover. One may plant in large clay pans and covered by pane of glass. Thus no watering may be needed until most of the seed are started. Growth begins by emergence of a radicle which will penetrate the soil. If soil is not loose, it may need help. A small bulb will form on tip of radicle and will later send up a leaf. Species are easily crossed to produce hybrids if anthers of mother plant are removed before ripening of pollen. Store pollen in advance in small stoppered glass phials, in refrigerator at 45°.

H. coccineus. The true Blood Lily, altho all *Haemanthus* are known as Blood Lilies. The umbel of scarlet or blood-red flowers comes in late Aug. to Sept., after a 3 months dormancy. Two long semi-erect leaves follow the flowers and remain green thru the winter and early spring. The scape is attractively marked by red spots on a bright background. Flowering size, \$1.50. Extra large, that should give two scapes, \$3.00.

H. Katherinae has been called the most beautiful of flowering bulbs, in both foliage and flowers. The umbel of bright red flowers is often 10" in diam., often there are 125 or more flowers. The broad leaves spread from the top of a 10" stem making this a very attractive plant, for a 7" to 9" pot. Flowers usually in June or as late as Sept. In Jan. or later the green top bends over, the neck splits and a new growth emerges. Price \$5.00.

H. multiflorus. In general appearance, it resembles *Katherinae*. Stem heavily spotted brown. This species is ideal for pots as it is more tropical and more tender. Blooms earlier. Flowers are described by botanists as blood-red but you may disagree. Blooming size, \$5.00.

We ship *H. Katherinae* and *H. multiflorus* as soon as ready.

Lycoris. Oriental Spider Lilies are natives of Japan and China. The entrancing beauty of their flowers makes them the most popular of garden bulbs in the south and very desirable pot bulbs in the colder sections. The most tender is *L. aurea*. It is hardy

only in the deep south. All the others are hardy up to Va., Ky., Okla., etc. They prefer sandy fertile soil with peat or leaf mould added, plentiful watering from mid-July.

Lycoris albiflora. Large white fls. with color markings. Almost hardy. 75c. 12/\$7.50.

L. aurea. Golden Spider Lily. One of the most beautiful of all bulbs. Not hardy except in deep south. 50c ea. 3/\$1.45. 12/\$5.00. Special low price.

L. radiata. Red Spider Lily. Hardest of these listed above. Hardy to So. Kans. Deep coral red. 25c. 5/\$1. \$2.35 per doz.

Nerine. This genus includes some of the most beautiful of flowering bulbs. They bloom in succession from about Aug. to Jan. Hardy only where temperatures seldom go lower than 26°, but they are fine pot bulbs. **Culture.** Pot or plant in acid, sandy soil. Add peat or leaf mould. Pot at once with bulb covered and a little deeper in garden, in full sun. When foliage yellows, withhold water. Keep as near dry as possible when dormant. There is only one reason why you do not all buy Nerines. You do not know their beauty and ease of culture.

Nerine Bowdenii. 10 or more fine pink flowers in an umbel 9" wide on a 15" scape. One of the finest Nerines and very easy. 50c.

N. Bowdenii, var. Pink Beauty. Has larger, finer flowers and flowers much later, usually in late Dec. or early Jan. Multiplies rapidly yet we can seldom have enough stock to list. \$2.00 each.

N. Bowdenii, var. Magnifice, very fine improved Bowdenii, similar to Pink Beauty but flowers earlier. Extra special price, \$1.00 ea. 12/\$10.00.

Sprekelia formosissima superba. Orchid amaryllis. Deep crimson flowers in orchid-like form. Much larger than common type, better color, more flowers. Evergreen. Fine in pots. Culture like Amaryllis. 50c ea. 3/\$1.25. \$4.50 per doz.

Tulbaghia violaceae. Mauve flowers produced thruout the year, a true ever-bloomer. Foliage has garlic odor if bruised. An acquisition for pot culture. 25c ea. \$2.00 per doz.

T. cepaceae. Superior clone buds are a deeper color than violaceae and flowers more freely. 35c ea. \$3.00 doz.

T. fragrans. This species has a large, true bulb, with glaucous green foliage, 18" long and 1" wide. It has no allium odor. The plant is a profuse winter bloomer in a cool room with a few flowers in summer. It has larger fragrant flowers than violaceae. Evergreen. Special price. \$1.00, 3 for \$2.50.

Vallota purpurea. Scarborough Lily. Large funnel shaped, scarlet flowers in late fall. Slightly difficult for inexperienced gardeners but very desirable. Grow in pots same soil as for Amaryllis with bone meal added, and top of bulb covered by 1" of compost. We can't guarantee our bulbs to flower this fall or at any time. Suggest you feed them with Spoonit or Blue Whale fertilizer. They are evergreen and must not completely dry off in winter. House or greenhouse culture is advised. They are a challenge to your gardening ability. Price \$5.00. We have a few small bulbs for \$1.00.

Zephyranthes. Fairy lilies. The smallest Amaryllid, 6"-12" tall. Fine in beds or borders. Hardy in middle south. In north, dig and store. They may be grown in pots. Give acid soil, sandy loam with leaf mould or peat. Full sun or slight shade.

Z. candida. Pure white, evergreen. The masses of white flowers in late summer make them outstanding in a bed or edging for border. Half hardy and easy in pots. 2 for 25c. \$1.00 per doz. 100, \$5.00.

Z. grandiflora. The largest Zephyranthes and the best pink. It is very easy to grow. In the south, its habit of flowering every time it rains in summer gives it the name of rain lily. 3/45c. \$1.75 doz.

Z. sulphurea. Deep yellow. 20c ea. \$2.00 doz.

The Alliae, or Onions, are now classed in Amaryllidaceae.

Allium Giganteum. 4 ft. tall, lvs., two inches wide. Flowers bright lilac, in dense globose umbels 4 inches across. \$2.50 each.

A. neapolitanum grandiflorum, twenty to thirty dainty white flowers on tall stiff stem. Fine for forcing. 3/15c. 50c doz.

IRIS FAMILY — Iridaceae

The Iris is the type genus of this family. Bearded Iris and Gladiolus are the outstanding members. Neomarica are lovely and curious house plants, truly "out of the ordinary."

Iris reticulata. This, smallest of bulbous Iris, is most useful for potting. Fragrant, violet blue flowers in January to February. Four bulbs in a 5" pot. Give a sunny window in a cool room. Hardy in south and in north if well protected. 25c ea. or 4 for 80c.

Dutch Iris Blue Ribbon. 20 bulbs 9-10 ctm. per pkg. Special 89c.

Freesias

Freesias are exquisite in beauty but their delicious fragrance is an appeal even stronger. Where they can be grown in the garden they are indispensable. They are easy forcers in pots and equally valuable for the window garden.

Culture. They are hardy only in the warmer sections of the south. Plant outdoors early before November if possible. Plant our large bulbs 2" or 3" apart and 3" deep in the garden.

Freesia Tecolote Marie. Largest, earliest and most beautiful of all white Freesias.

Freesia Tecolote Hybrids. Flowers of immense size, wide open and delightfully fragrant. Plants of unusual strength and vigor. Tall strong stems. Much finer than the standard commercial varieties. We offer them in mixture and Marie, white, at new low price for the large bulbs. \$2.79 for 50. 100, \$4.79. 50c doz.

The **Gladiolus** listed below will be ready late fall. They will be sent as soon as ready. Spring catalog out January, 1963, for larger list of Var.

New **All American Gladiolus.** Every garden should have these new Glads as well as the older varieties. Four 1963 introductions:

Frisky. Dainty deep red, gold edging. Miniature. **Goldenlock's** Miniature. Deep golden yellow. Large flowering varieties, **Morning Sun.** Ruffled bright yellow. **Victory.** Tall glowing scarlet. 35c each. \$3.65 doz.

Neomarica or Walking Iris are tropical and are favorite house plants for their unusual habit of growth.

Neomarica gracilis. Smallest and earliest. Use 5" pot. 75c.

N. Northiana. Larger plant and flowers, slow propagator. Use 6" pot. \$1.75.

N. hybrids. We crossed the above species and raised plants with flowers as large as Northiana, as profuse as gracilis and plants midway in size. They are rapid multipliers. \$1.75. All 3 kinds for \$3.75.

Sparaxis. Richly colored fls., on plants about the size of Freesias. Mostly red shades. No perfume. Easier to flower in pots than Freesias and hardier outside in south. Large. 3/20c. 65c doz.

LILY FAMILY — Liliaceae

Lachenalia aurea. Beautiful golden yellow pendulous flowers. They are ideal bulbs for pots, blooming earlier than most any bulb. Culture similar to freesias. 3 for 45c, 6 for 90c, \$1.75 doz.

Leucocoryne ixiodes odorata. (Glory of the Sun.) Large, fragrant, blue flowers in spring. Culture like freesias. Plant 4 inches deep. The exquisite flowers last a long time when cut. 3 for 50c. \$1.85 per doz.

Ornithogalum arabicum. (Star of Bethlehem.) The showiest species. White with glossy black eye. Easy in pots. 3 for 40c, \$1.50 doz.

Muscari. Grape-Hyacinth. Spring flowering. Of easy culture, as for Hyacinths. **Muscari Armeniacum**, bright blue, splendid for forcing, as well as outside. **M. Botryoides Album**, white. 3/15c. 50c doz.

Scillas are closely related to Hyacinths. All are hardy except *S. peruviana* and it has been grown in gardens in Brooklyn on L.I.

Scilla peruviana is an ideal bulb for pots or garden. It is hardy to N. Car. and in Long Island. As a house plant it does well in cool but sunny rooms. Give full sun outdoors. Winter bloomer. The short foliage is nice and flower head is oval and on a short stem. Blue fls. Sometimes a White. Blooming size, 50c. 3/\$1.25. Special \$4.50/doz.

Veltheimia viridifolia. This is one of the most beautiful plants one can grow in a pot. The glossy vivid green leaves are wavy margined and form a perfect rosette much like a bird's nest fern. From the center arises a scape with tubular, drooping flowers closely spaced. The color is a deep rosy or purplish pink of an ineffable tone not found in any other flower. If planted early in Southern gardens or in pots it should flower as early as Dec. 15 and continue for nearly 3 months.

Culture is very easy. Use a sandy or sandy loam soil to which is added fine screened peat or leaf mould about one-third or fourth. Some charcoal is good. Read general potting directions. Price \$1.25 each. 3/\$3.35.

OXALIS FAMILY — Oxalidaceae

There are three types, Winter growing, Summer growing and Evergreen. The following are winter growing and blooming or evergreen. Oxalis are the brightest and most vivid of winter flowers for a sunny window or in outside beds in the deep south, where temperatures do not go much below about 26°. They give a profusion of bloom over several months time. They need a cool room.

Culture. Plant about 2" deep, 3" apart. Large bulbs may be farther apart and a little deeper. In pots, the smaller may go 6 in a 5" pot. They need full sun exposure and do best in a very sandy soil, rich or poor. Flowers close at night and on dark days. Tuberous rooted species start very slowly. Keep them moist and be patient.

O. Bowiei. A large plant with bright rose red flowers. 3 bulbs to a 5" pot 5c ea. 50c/doz. \$3.75/100.

O. cernua. Bermuda Buttercup. Deep golden yellow flowers. Very profuse. 5c ea. 50c/doz. \$2.50/100.

O. crassipes. Flowers bright rose. Evergreen and everblooming increases by tubers and can be moved at any time. Plant at once. Large tubers 15c ea. \$1.00/doz.

O. Grand Duchess. Low growing plants, but give a profusion of very large flowers in two colors. **Lavender, Pink, and White**, 5c ea. 50c/doz. \$3.50/100.

O. hirta. This rare and unusual ovalis makes a semi-erect leafy stem about 8" long. The violet flowers are borne in the axils of the leaves. 2/25c. 12/\$1.00.

Oxalis martiana aureo-reticulata. This is a beauty. Variegated leaves, flowers lavender. 75c ea.

O. Regnalli. Large, truncate leaves, reddish on under side. Trifoliate. Nearly or quite evergreen and everblooming. Large white flowers. Tuberous rooted. 50c ea.

Oxalis Special. The bulbs offered in this lot are assorted in size and color. They will all flower well. Some are accidentally mixed, others are surplus. Price, 25 for \$1.00.

THE CALLA LILY FAMILY — Araceae

This family contains the so-called Calla Lilies or Zantedeschia, Black Callas and other Aroids.

Culture. All Zantedeschias, Arum palaestinum and other aroids listed here are

desirable for pot culture. *A. palaestinum* will start about Sept. or later. Do not put this bulb into moist soil before that or it will rot. *Zantedeschias*—pink and yellow—may be potted by about Dec. 15. Don't rush them, as too much water before they start to grow may rot them. It is really better to start in early spring, here in late February. All do well in the garden in a moist semi-shaded cool place. They are not hardy in cold climates; dig in fall. The White Calla usually blooms in California in the garden in late winter. They may be planted in early fall in pots or garden. All do best in mildly acid soils, on sandy side. For acidity add peat. Most Aroids are shade plants.

It is an error to keep large White Callas growing continuously. If rested thru summer you will be rewarded with flowers. Callas as pot plants need some sun, enough to prevent spindly growth, plenty of light and like all plants, good ventilation. They need abundant water but good drainage.

***Zantedeschia aethiopica*.** Well known **White Calla**. They can be potted anytime between Sept. 1 and Jan. 1. Even later if available. Water once when potted to settle soil. Then keep soil barely moist until growth is well started. When growing well they need plenty of water and perfect drainage, give about half shade. They are hardy outdoors down to 15° but tops may be cut down by frost at about 20°. Blooming size, 25c. Large 50c. Small offsets for foliage only, 15c.

***Z. rehmanni elegans*.** Light pink Calla. Easier to grow and flower than the dark pink. A few are very light, almost white when forced but darker in the garden, and always beautiful. Large bulbs, 40c. 3 for \$1.15. Delivery Nov.

***Z. elliotiana*.** Deep Golden Yellow Calla. Like all the callas, they need some sun. If they do not have it they grow too tall and weak and may fail to flower. Half sun is usually right. Delivery Nov. 40c ea. 3 for \$1.00.

***Arum palaestinum*.** **Black Calla. Solomon's Lily.** Foliage and flowers are shaped like Callas but flowers are black and odorless. Plant 4" deep in garden, not so deep in a pot. Begin to water about Sept. 1. Flowers in Feb. Large for 50c and \$1.00 ea.

***Heliconia muscivorus*.** Twist arum. A curiosity. Blow flies like its "fragrance." The flower spathe is contracted in the middle and bends at a right angle and opens in an 8" or wider flower. Pale purple, covered by long white hairs, the tube spotted. Summer flowering. Hardy in deep south. We have very few tubers and must price all sizes at \$2.50.

***Anthurium andraenum*.** The cordate leaves make them useful as foliage plants alone but a mature plant will flower six times a year. Flowers are calla-like, but rather flat, in glossy red, pink, orange, coral, rose and rarely white. They are everblooming if given correct conditions at all times, but sometimes take a vacation when very hot, very cold or very dry.

Culture. Anthuriums are tender tropical plants, suitable only for pot culture. **Soil formula.** They will grow in most any organic compost. These plants are planted in Hapuu. Use Blue Whale liquid fertilizer or Spoonit once a month, after plants are well established. The preferred minimum night temp. is 60° or over. 45° does little harm, other than to stop growth and flowering. Air should be very humid. Spraying foliage daily increases air humidity. They should never become completely dry, thruout. Water about every two days.

Special Price. Small plants for \$1.50.

Begonias. See spring catalog out early January, 1963. Tuberous rooted, etc.

THE GESNERIA FAMILY — Gesneriaceae

The Gesneriads listed here are tropical or semi-tropical. They are strictly house plants outside of the tropics. Most of them are for the warm house. All are either tuberous rooted and deciduous or fibrous rooted and evergreen.

Gloxinia culture. The soil may be one part by volume of sharp, coarse sand and 2 parts

peat or peat and leaf mould. Add 1 tablespoon bone meal for a 6" pot. Mix thoroly. Set tuber a little under soil surface concave side up and mulch with ½" wet sphagnum. Last of all water until a little runs thru at bottom. These are tropical plants. The best starting temperature is at least 80°. They will start, but a little more slowly at 70°, with 60° or over at night. Keep soil moist and they can be in full sun until foliage appears, then slightly shaded. The plants need good light and more sun than most Gesneriaceae. Leggy plants result from insufficient light. The secret of producing good Gloxinia is in frequent feedings. We use Spoonit and/or Blue Whale.

Gloxinias. Improved California grown. Large tubers, in the following sorts: **Crimson Rose**; **Emperor Frederick**, scarlet with white throat; **Prince Albert**, dark violet; **Princess Elizabeth**, blue with white throat; **Tigrina**; **Violacea**, soft violet. **Red Edge** and **Pink Edge**. **Mount Blance**, white. These will be sent when dormant or as soon as ready. 50c each. One each of the listed for \$3.50.

Aeschynanthus (*Trichosporum*). (**Lipstick plant**). This is a nice trailing, almost woody vine. In nature, they are epiphytal and climb trees. The plants are attractive and the freely produced large flowers are tubular and vividly colored.

They are tender tropicals and shipment will be made only when weather permits. We grow them in wire baskets, lined thickly with sphagnum and with peat and sand in center. They do well in pots. They require constant moisture. Leaves and flowers drop when dry. *Aeschynanthus lobbiana* has scarlet fls. in a purple calyx. Price \$1.50.

Rechsteineria Hummell's hybrid. The flowers are a flame red. Large bulbs \$2.00. We have a few small for \$1.00 each.

R. leucotricha. A tuberous plant, which produces large white velvet leaves, and shocking pink tubular flowers. \$1.50.

Episcia. They are very tender plants. Order before cold weather, if ordered late they will be sent about May to cold states. **E. dianthiflora.** This is a vigorous grower with small green leaves and white flowers with fringed petals in spring and summer. \$1.50. **E. Ember Queen.** Dark green with silvery green midrib. \$1.25. **E. fulgida.** (Flame Violet.) Medium bronze with silvery green veins. Lovely red flowers—but not a violet. \$1.25. One each of the three for \$3.50.

Columnneas. Are epiphytic climbing vines, having large, vivid red flowers. They may be grown in pots, soil similar to that of other Gesneriads. **Columnnea Allenii**, \$1.50. **C. hybrid**, \$1.50.

Achimenes have been popular plants for a very long time. They are not too hard for the average amateur. The plants and the flowers are diverse in size and form.

Culture: From 1 to 5 tubers may be grown in 5" pot. The compost in pots may be the same as for Gloxinias and other Gesneriads. Protect them from winds or even strong drafts. It dries them out too much and the compost should never become dry. They need about the same sun exposure as Gloxinias. They like frequent feeding. **Achimenes.** Assorted 15 for \$1.00. They will be sent as soon as dormant.

AFRICAN VIOLETS — Saintpaulias

Few would question the statement that African Violets are the most popular house plant at the present time. They fit perfectly into the modern smaller homes and rooms, where things are fixed or built in. Every convenience in a small space. They may be grown in an east, south, west or north window or even the basement if given artificial lighting and correct temperature. See under Garden Reference Books, Growing Plants Under Artificial Lights.

They win favor because of their daintiness and beauty, their everblooming habit, their diversity in foliage, flower color and form. There seems to be no limit to their possibilities in the hands of breeders.

Culture. The question most often asked is, "How can I get constant bloom? My

plants are healthy and grow luxuriantly. The foliage is deep rich green, beautiful plants but no flowers." The answer is, you do not give them enough light or the pot is too full of plants. If too full of leaves so light does not get to crown they will not flower. Keep all extra suckers from plant unless they are open to light.

Sun exposure. Lack of sufficient light intensity is one of the most frequent causes of non-blooming. All shade plants need a certain amount of modified sunlight to make them flower. In the winter, the sun is at a low declination. Its rays must pass thru several times the thickness of atmosphere penetrated at noon in the summer when the sun is directly above or at "high declination." Very little shading is needed on the greenhouse in winter. Treated thus, our plants bloom profusely all winter. Very likely plants in a south window, anywhere in the north temperate zone, in winter, will be sufficiently shaded on the brightest days by a thin curtain. It may not even be needed at all and on days of less than maximum intensity remove the shade.

But summer sun is much stronger. One must give more shade. It should not, however, be too heavy. The color of the foliage will tell you what they can endure. When healthy plants have light, yellowish foliage they probably receive too much sun.

Humidity. The humidity of our homes is likely to be not much over 25%. One can increase the humidity around the plant sufficiently by setting the plants in saucers. These may be partly filled with small gravel. Set pots on top of gravel and pour in water until it does not quite touch pots. If you have a greenhouse, keep the walks wet.

Good ventilation is needed by all plants, but Saintpaulias do not like drafts. Slow movement of air currents is more conducive to their comfort.

It is best if **temperatures** do not go below 60° at night. **Watering.** The water should be near room temperature and never over 10° lower or higher. We water entirely overhead in our greenhouses. It is good to wash your plants when needed, but don't let direct sun on plants until they are dried off.

Fertilizers. We use Blue Whale and/or Spoonit.

Soil. Plants have a considerable tolerance and do well in a wide variety of soils. Soil should be at least mildly acid in reaction and a type that will drain easily and quickly. There are a number of good soil mixtures on the market. See supplies.

Start leaf cuttings. A good many growers start cuttings in water. We believe a better way is to start in terralite (a fine grained form of vermiculite), keep moist and in good light but no sun. Long distance shipments should go by air, the same as for plants. If leaf is wilted, soak 2 hours in water or until leaves are fresh looking.

We have a number of new varieties to offer both in plants and leaves. Some are in small quantity, so please give us a few substitutes or tell us we may substitute. We always send something just as good or better.

Sales Tax. Californians must include 4% Sales Tax. Out of state customers sending plants as presents to a California friend must also pay it. Please read "Terms and Instructions for Ordering," and comply on all points.

Please add 50c toward postage and packing. If wanted by Air Mail or Special Delivery you must pay for this. Estimate cost and promise you will send the difference if not enough.

For prices on plant stands, pots and other supplies for growing African Violets please see "Garden Supplies."

Ann Bly. Huge bright pink star, heavy ruching. \$1.25.

Antique Mahogany. New. Rich deep mahogany red single, with chartreuse edging, dark pliable foliage. Small plants \$1.00.

Artists' Touch. Full deep purple dbl. with painted white edge on bronze foliage. \$1.25.

Arctic Night. Plain leaves, large double dark blue, very good flowering. \$1.25.

Breathless. Holly leaves. Fringed double raspberry. \$1.25.

Cambridge Pink. New. Fine dark pink double. Small \$1.00.
Candy Lace. Lovely white with pink, edged with green, ruffled lvs. \$1.00.
Charm Song. Charming light blue double. Tailored foliage. \$1.00.
Cloud Mist. Exceptional, large pure white double on soft light green foliage. \$1.25.
Cortez. Wine purple dbl., showing yellow anther. Tailored dark foliage. Sm. \$1.00.
Darans' Pink. Ruffled single pink. Ruffled foliage. \$1.50.
Debbie Moon. Slightly ruffled single pink flower with dark eye. \$1.25.
Delft Imperial. Very large dark blue ruffled double, white edged, dk. fol. \$1.00.
Fair Elaine. Loveliest of all huge deep pink full dbl., crystal white edge that never fades. Dark green foliage. Sm. \$1.00.
Fantasia. Lavender flowers with dots and dashes of dark violet. \$1.25.
Flash. Raspberry double with darker strip. Plain leaves. Very pretty. \$1.00.
Feathertop. Heavily frilled pink double. Deep bronzy leaves, reverse side red. \$1.00.
First Beau. Light lavender star single. A blend. \$1.25.
Frilly Blue Cindy. Dark wavy leaves. China blue double. \$1.25.
Forever White. A very profuse large single pure white. Foliage dark green. \$1.00.
Green Dawn. Bright pink frilly dbl. fl. green edge. Frilly foliage. \$1.50. Sm. \$1.00.
Hans Brinker. Deep blue bicolor with white edge. Dark green leaves. Good flowering. \$1.50. Sm. \$1.00.
Highlighter. New. Full double pink with deeper center, soft girl type foliage, exceptional bloomer. Small \$1.00.
Hi Hopes. Huge semi-dbl. blue geneva type flowers. A Star. Small \$1.00.
Kings Ransom. Heaviest blooming single red to date. Good holding color, heavy clusters held well above dark green tailored foliage. \$1.50. Sm. \$1.00.
Lillian Jarret. Double pink. Variegated leaves. Sm. \$1.25.
Mandarin. New. A new shade of dark wine bicolor, ruffled double blooms on very dark shiny foliage. Sm. \$1.00.
Mary R. Red on back of dark green foliage, shines like silk. Makes a beautiful symmetrical plant. Double dark pink \$1.50. Sm. \$1.00.
Mizz. Lovely ruffled double pink. Foliage also ruffled. \$1.25.
My Maryland. Semi-double powder blue. \$1.25.
Never Lovelier. Clear white edged double, orchid, dark foliage. Sm. \$1.00.
Norah. Lovely dark pink double, girl foliage. \$1.25.
Organza. Wavy, serrated pointed leaves, double white frilled light blue edge. Sm. \$1.00.
Oriental Red. Most prolific full dbl. red. Small \$1.00.
Perky's Bride. Deep pink double with girl foliage. \$1.00.
Pink Baton. Large bright fringed double pink. Ruffled leaf. \$1.00.
Pink Fire. Double fringed, very showy flowing flame pink, lvs. red backed. \$1.00.
Pink Mist. Soft Pink double, foliage bronze. \$1.00.
Purple Gown. Good flowering single plain foliage. \$1.00.
Racy Red. Star red single. \$1.25.
Rebel. Semi double star. Red. \$1.00.
Red Crown. Glowing wine-red, tailored foliage. \$1.00.
Redderness. Double very small growing plant. \$1.25.
Red Fable. Reddest dbl. by far, on girl foliage. Small \$1.00.
Savanah Sweetheart. New. Enormous, ruffled, deep pink double on light green fol. A must. Small \$1.25.

Shrill. New red color for African Violets. Very pretty. Sometimes come white and red. \$1.25.

Sin Purple. Purple fringed double. \$1.25.

Snow Ballet. Huge full dbl., clear white blooms in profusion on dark green tailored fol. Largest double yet. \$1.25.

Spun Velvet. Giant double pink flowers on bronze wavy foliage. \$1.25.

Sweetheart Blue. New. The largest blooming light blue double. Fine. \$2.00. Sm. \$1.00.

Tall Talk. New. A giant deep wine double with a white edge that will not fade, heavy clusters, dark foliage. Small \$1.00.

Tiffany. New. Blue with white edge. Small \$1.00.

The Mikado. Dark blue double. \$1.00.

Top Sail. Wavy full double, dark blue, dark foliage. \$1.00.

Beginners collection our selection 5 for \$4.00.

Plant will be sent in 2¼" plastic pots when possible. We will send an EXTRA plant on \$10.00 order or two extra on \$20.00. You may have choice of color, double or single. We have many new varieties in too small number to list in this catalog.

Leaves, 50c each. \$5.00 doz. 25 for \$9.00. 50c for postage and packing. \$1.00 extra if wanted by air mail. If special delivery add 45c. Please give a few substitutes, if you do not, we will substitute with as good or better varieties if necessary. Dbl. means double, b blue, p pink, w white. Many new varieties in this list. We have a list of several hundred varieties for stamped and addressed large envelope or 10c.

Alpine Halo	Cellini	Hans Brinker, b
Ann Spencer, p	Cheri Belle	Highlighter, p
Antique Mahogany	Cloud Mist, dbl w	Hi Hopes, b
Apollo	Cluster Pink	Isle of Dream
Ardent Red	Claret	Independence
Artist Touch, dbl	Daran's Pink	Jack Frost, w
Athena, dbl	D'Amour	Jane Star
Banner, dbl b	Deft Sweetheart, dbl b	John B
Big Boy Blue	Dorothy Gray Supreme, dbl p	King's Ransom
Black Cherry Supreme	Doric	King Maker, dbl p
Black Wine	Double Pink Waverly	King Neptune Supreme
Betsy Ross, dbl p	Double Pink Miracle	King of the Blues
Blue Le Fleur	Double Ruffled Queen	La Femme
Blue Lace	Dresden Dancer, dbl p	Lillian Jarrett, var lfs
Blue Modeste	Elfin Dream, dbl	Little Jewel Supreme, dbl p
Blue 'N Pink	Fair Elaine, dbl p	Love and Kisses (88)
Black Light, Var. Lf.	Flash, dbl	Lule
Blue Rose	First Beau	Magic Flame, dbl p
Blushing, dbl, p & w	Feliz	Mandarin
Blushing Beauty, p & w	Florentine Lace	Mary R, dbl p
Brandy Wine, dbl r	Forever White	Melody Bonnett
Bold One	Geneva Nueva	Miss Adorable, dbl p
Cambridge Pink, dbl p	Geneva Wonder	My Hope Supreme, dbl
Cathy Ann	Green Dawn, dbl p	Mizz, dbl p
Cerama	Green Years, dbl w	My Sin, dbl

Never Lovelier, dbl	Racy Red	Stained Glass
Nite Shade	Redderness, dbl	Startling
Norlina, dbl	Rebel	Stranger
Norah, dbl p	Red Fable	Susan, dbl b
Opmoc	Red'n Lilac	Sweetheart Blue, dbl
Orchid Smoke, dbl	Sea Chanty	Tall Talk, dbl
Oranga, dbl	Savanah Sweetheart, dbl p	Tall Tales
Oriental Red	Shrill, dbl r	Tea Rose, dbl p
Parker's Capri, dbl	Silver Moon Supreme, 2	Tea Time, w
Peppermint Pink	Sin Purple, dbl	Tiffany, White Edge
Perky's Bride, dbl p	Sir Echo, dbl	T. V. Vallin Pink, dbl
Pink Holly	Sister Alice, p	Tweed
Pink Jade, dbl	Snows of Kilimanjaro, w	Wee Moffet, White Edge
Pink Geneva	Spun Velvet, dbl p	White Sales, dbl
Purple Frills	Star Frills	Winifred Liegh, pink
Purple Gown	Star Holy	Winter Green, dbl

African Violet Leaves 35c ea. 3 for \$1.00. \$3.00 doz. Any over 12, 25c each. 25/\$5.00. We give extras depending on size of order. We will be glad to make selections for you if you will give us price range, color, single or double.

Alaskan Waters, dbl b	Dbl. Pink Fire	Indiana Doll, dbl p
Aletha Martin, dbl	Dbl. Orchid Prince	Legionnaire Blue
Appealing	Elegance, w	Lemon Drop
Angel Fringe	Fair Elaine, w	Lavender Spice
Blue Crepe	Evelyn Johnson, dbl p	Little Giant Purple
Blue Matel	Eve Shoemaker, w	Love Knot
Blue Warrior Sup.	Fringed Haze, w	McGenty
Cathy Reed, p	Giant Killer	Nonnie
Cloud Fringe	Giant Purple Monarch	Pacific Moon, w
Constancia	Headliner, p	Pink Camellia, dbl
D'Amour, r	High Noon	Pink Cloud, dbl
Delicate Affair, dbl p	Holly Halo	Pink Jade, dbl
Desert Star, r	Hugonaut, dbl	

Miniatures. Bashful, Candle Light, Gremlin, Morning Glory, Jessie Cutup, Susan, Tinker Bell, Star Tip.

Specie Saintpaulia leaves. Grotei, Grandifolia, difficilis, orbicularis, tongwensis. Leaves only in the Miniatures or Species. 35c each. \$1.00 for 3 or \$3.00 per 12.

THE ORCHID FAMILY — Orchidaceae

The ideal place for an amateur to grow orchids is in a hobby greenhouse.

Culture of Cattleyas. By far the most desirable of orchids. Many amateurs are having success in growing and flowering this most beautiful flower. Briefly you must have a greenhouse, a room or a glassed in porch where the plants will have good, strong light but no direct sun, unless a little in very early A.M. or late P.M. Greenhouse glass must be shaded by a coat of white wash or shading compound. In the home, shading may be had by using muslin curtains. If the foliage becomes very light green or yellowish the light is too strong; if a deep rich green, the shade is too much. 65° to 80° is close to the best tem-

perature range. Note the temperature, light exposure and humidity favorable to African Violets. The same is about right for Cattleyas. You can grow them side by side. But watering is different.

We spray the foliage of Cattleyas at least once a day in summer and if hot often twice. This cools them. Do this about noon, earlier if temperature becomes too high. Do not spray in late P.M. as foliage should become dry before night. When cool weather arrives we spray less often, much less often in winter. Once or twice a week may be enough or even too much, if you do not properly heat for their comfort. A little water held around the base of a bud spathe may cause it to blacken and rot off. Over watering Cattleyas is the most common error. We do not usually pot water oftener than once a week and often spraying is enough if some falls on the potting mix. You must study your plants and note their reactions. Success will reward you.

Cattleyas. We offer blooming size plants for \$5.00. These are in 4" or 5" pots. Assorted species and hybrids.

C. Genevieve Toy. (C. Cordary x C. Ardentissima.) Flowers very dark and beautiful. Spring. 5" \$15.00.

C. Harrisoniana. Lovely small lavender pink flowers long lasting. \$5.00.

Brassavola culture. They may be grown in any media used for growing orchids. They may be grown in lath house or under trees in Southern California.

Brassavola glauca. Large white flower, slightly fragrant, often tinted with green, lip white sparsely marked with pink and purple or entirely white. Loose, with material to pot, by Parcel Post, \$8.50.

B. Digbyana. Plant resembles a Laelia. The white flowers have a fringed lip. We grow in baskets. Price \$9.00 f.o.b. express. Out of pots with enough potting material, by Parcel Post.

Oncidium cebolleta. Rush-like leaves of bronzy color, 8 inches long crowded together. The flower stem is well branched and carries dozens of small yellow and brown flowers. \$5.00 ea.

Epidendrum o'brienanum. This orchid has a large terminal cluster of brilliant red flowers, each in the typical orchid form. The flowers open 10 or more at once and are about 1¼" wide. The plant makes a large cluster of tall stems, 3 ft. or more. Under good culture they flower all the time. They will grow well in full sun exposure; and abundance of water in summer. They grow easily in the garden in the south. In the north they are easy in pots or baskets. Small rooted plants 75c ea.

E. Hawaiian hybrids. Button-hole Orchids, white, orange, purple and yellow flowers as well as two-tone. Rooted cuttings. \$1.50 each. Assorted only.

Epiphronitis veitchii. A choice miniature orchid. Brilliant flowers, orange-red, blooms in very small sizes. Easy to grow. \$2.25.

Habenaria radiata. The Egret Flower. (At last! An orchid anyone can grow anywhere.) A deciduous terrestrial orchid from the orient that grows from small bulbs about the size of a bean. The glistening pure white flowers are held on stems twelve to fifteen inches high. Each stem carries two to five flowers one to two inches in diameter. The long green spurs add much to the attractiveness of the flowers. The feature of the flower is the fringed edge of the lip which gives the flower the appearance of a crane in flight. The individual flowers are long lasting and very pretty.

The plant is extremely hardy and will survive sub-zero weather, but will grow equally well in our southern climates or in a glass house. Packed moist, the bulbs will keep for many months in a refrigerator, and may be planted monthly in order to have flowers nearly all the year. It may be planted in almost any medium, such as garden soil, peat and sand mixture, orchid mixtures, sphagnum moss or leaf mould. If in moss it must be fed regularly, otherwise treat it like any other plant in your garden or house. The one most important cultural point is never to let it go dry. It must be kept moist at all times. We recommend six bulbs to a four inch pot. 6 for \$1.50. 12, \$2.50.

MISCELLANEOUS

Tecolote Ranunculus. Giant Double Camellia type blooms and huge brilliant Ruffled Doubles. 50c doz. \$3.75/100. We also have smaller bulbs at a special low price of \$2.20/100. For lots of flowers for picking or flowering in your garden plant several hundred. 500/\$9.00. **Anemone Monarch de Caen.** Magnificent strain of single Poppy Anemone with immense flowers. Mixture 50c doz. 100/\$4.00.

Culture. Hardy only in deep south. It is best to start after summer heat has gone—in mild autumn weather. Don't forget to keep them moist. Transplant to garden in deep south or to pots in north. You can start them or grow them in a cool room in the house in winter. They should have sandy soil with peat added. Heat is their enemy.

Aphelandra Louisi. A new plant for the window garden or greenhouse. Deep green with white veins. Flowers are yellow. New and very popular. Small plants \$1.00 each.

Ceropegia. The following are vines having long trailing or twining stems. They may be grown in soil composed of loam, sand and leaf mould or peat, in pots or hanging baskets. Plant at once and keep only slightly moist until started. The flowers are very unusual. Prices are for small tubers or cuttings.

Ceropegia Woodi. Hearts on a String. Sweetheart vine. Rosary vine. Heart shaped leaves. The most desirable species. 50c.

C. debilis. Cylindrical leaves. Rapid grower. 35c.

C. Barkleyi. The oblong leaves are pointed at the apex. 60c.

Cacti and Succulents. 10 assorted Cacti or Succulents, \$2.00. 20, all different, \$3.25.

Zygocactus. (Christmas Cactus). These are very popular plants. We believe are very good hybrids. We have over twenty varieties. If you have any of the ones we list mention them and we will substitute another variety or varieties when you order. We will send growing directions with your order.

Zygocactus salmonea. Old-Fashioned Thanksgiving cactus. **Z. delicatus.** White Christmas cactus. **Z. Mia.** Two tone pink flowers. **Z. Pink Lady.** Comparatively large flowers. **Z. bicolor.** **Z. Amelia Manda,** Good pink flower. **Z. Andrae** variety. **Z. Peacharoo,** Peach-tinted flowers. **Z. Turks Turbin,** Recurved petals. Prices. \$1.25 each. 4 for \$5.75. 10 all different, \$10.00.

Schlumbergera Gaertneri Giant. A larger growing form of the Easter Cactus, leaves up to five angled, may bloom most any time during the year. Large flowers. A must for your collection. \$1.50. **Rhipsalidopsis Rosea.** (Violet Beauty.) One of the most heavenly plants when in flower. Very small joints, flowers violet rose the size of a quarter which at times may completely cover the plant. \$1.25.

Heliconia species. Heliconias are sometimes grown in the greenhouse, or out-of-doors in warm regions for the foliage effects, making large clumps if given room. The plants thrive well in rich loam with plenty of water. They have large banana-like leaves. \$2.00.

Tree Peonies. Will bloom April and May the first year. True to name. All fully double. **Higurashi,** Red, **Yachiyo-Tsubaki,** pink, **Hanadaijin,** purple. \$2.40 each. 1 each of the above value \$7.20 for \$6.60. **Kinko.** Fully double bright yellow, \$3.80. All are top quality, large 2 year old grafted plants. One each of the four, value \$11.00 for \$9.90.

Tulips. We have two Tulip species for your enjoyment this year. **Clusiana.** Lady slipper tulip-white flushed rose. 3 for 45c. \$1.65 doz. **Red Emperor.** Graceful dark red vivid yellow edge. 3 for 55c. \$1.75 doz.

Tradescantia pexata. The leaves are densely covered with white hair. Flowers lavender. An interesting plant for your window or greenhouse. 50c ea.

Gingers. Culture. Plant in rich soil, provide light shade and plenty of water. They

should never dry out while growing. They refuse to flower if keep too shaded. The flowers are produced in terminal heads and are very fragrant. Delivery any time.

Alpinia nutans. Shell ginger. Very tall growing evergreen ginger lily. The attractive flowers are produced at the top of the leafy stems. Flower spikes hang downward like a cluster of grapes. In bud it is white tipped pink. Open flowers exhibit orange and red inside. \$1.75.

Hedychium coronarium. Garland-flower. Floral bracts large and firm and closely imbricated, with 4 to 6 white very fragrant flowers. \$1.00.

H. flavum. Yellow Ginger. Much like Gardnerianum, tall grower. \$1.00.

H. gardnerianum. (Kahili Lily) Lvs. 1½ ft. long and 6 inches wide; fls. light yellow, with red stamens. Fragrant and a sure bloomer. \$1.00.

Hoya. Much in demand. Used in dish gardens as small plants, or worked on trellis or pole, as a specimen, they always attract attention. **Hoya Bella.** Hanging basket Hoya. Dainty pointed foliage, flowers freely with clusters of white star-like flowers, pink center. Very fragrant. \$1.50. **H. motoski.** One of the best, very large, round, shiny leaves. Blooms over a long period of time, white, very fragrant. **H. Silver Leaf.** This is quite a different plant. Large umbel of lovely maroon flowers. Leaves beautifully marked with silver. \$3.00.

Bird of Paradise (*Strelitzia reginae*). Plants 8 to 10" tall in 3" plastic pots growing instructions with each plant. They can be grown indoors and out. 89c each. 3 for \$2.60.

THE PINEAPPLE FAMILY — Bromeliaceae

Bromeliads include *Billbergia*, *Aregelia*, *Aechmea*, and many other genera.

Billbergias are most unusual and fascinating plants. Not only are the flowers in intriguing pastel shades but the floral display is made brilliant by the large vividly colored bracts that cover the scape. The leaves form a rosette and are more or less rigid. Some have brightly colored leaves and others are often mottled, striped or barred. All are desirable foliage plants.

In the outdoor garden they should have the same soil as recommended for pots. A few, like "nutans," will grow in nearly any soil but will do much better in the type recommended. They do well on the trunks of Palms.

They need about half shade. Too much sun will burn and finally destroy the foliage. Those species and varieties having highly colored foliage do not develop their rich colors when too deeply shaded. Most of our plants are grown in a well shaded Clivia house. When well established and growing, richer colors may be brought out by giving a little more sun than we do. **Culture** of *Aechmea* and *Aregelia* is the same.

Aechmea bracteata. Beautiful thick green leaves, long lasting flower spike, pink bracts. \$2.50.

A. calyculata. The cones of bright yellow flowers are carried on thin stiff stems 18" high. Tubular rosettes of bright green foliage are about 15" high. \$1.50.

A. fasciata. The Urn Plant. Urn-shaped plant of green leaves banded white, powdery substance. Very attractive in foliage, but the flower, which lasts for months, is even more so. It flowers July to August with pyramid shaped heads of pink bracts from which emerge numerous flowers colored French blue at first, turning to violet and then to deep rose. \$8.50.

A. Foster's Favorite. An outstanding hybrid nearly identical with *Aechmea recinae*, but instead of the foliage being green, it is a bright shade of glossy red. The drooping flower stem is very long. \$4.00 each.

A. luddemanniana. Bronze to maroon leaves, mottled darker, white berries turn to purple. \$5.00.

A. mariae-reginae. Robust rosette of broad, gray-green, leathery leaves, recurved and with toothed edge; stout spike with pendant, delicate pink bract-leaves, topped by cylindrical head of red-tipped berries and violet flowers. \$7.50.

A. miniata var. discolor. Dark green foliage with red back. Berries stay on a very long time. \$4.00.

A. penduliflora. Bronze red foliage, blue and white berries. \$3.00.

A. tillandsoides. Foliage resembles Billbergias. 1 foot high, red bracts. Flowers yellow followed by turquoise. \$5.00.

A. Weilbachii. Attractive rosette of oblanceolate coppery-green leaves wine red beneath, and spined; inflorescence on panicle with glowing crimson bracts and orchid-colored ovaries and flowers. \$4.00.

Billbergia Burkholtzi. Tall, slender, erect green leaves. Rose bracts, lavender fls. \$2.00.

B. distachia. Long, reddish green lvs., spotted cream. Rose bracts, blue and green fls. 75c.

B. Elvenia Slosson (Nutans x Alberti). Tall plant with very attractive flowers in spring. It takes a lot of postage and its fine quality makes it cost \$3.00 each.

B. nutans. Mid-winter, beautiful inflorescence on small plants. Fine pot plants. 75c.

B. pyramidalis. Wide green lvs. Red fls. tipped violet, red bracts. \$2.00.

B. Rubro-cyanea. Most colorful foliage, red and green spotted cream. Green fls. edged blue. Crimson bracts. \$1.00.

B. speciosa. Green lvs., striped on back. Green fls., tipped blue. Rose bracts. \$2.00.

B. Theodore L. Meade. Green lvs. and large, beautiful inflorescence, continuous all year on new growths. \$1.50.

B. thyrsoides. Forms very large, wide open rosettes of leaves. It blooms in August with a large flat head of rosy flowers held erect on a stem covered with deep rose bracts. It is commonly known as Torch Billbergia, and is really worth having. \$3.00.

B. thrysiflora (pyramidalis x amoena). Finest hybrid. Beautiful inflorescence. \$1.50.

B. Zebrina. Lvs. banded white on back. Salmon bracts, green fls. \$1.50.

Cryptbergia Media. A bigeneric bromeliad hybrid of Billbergia and Cryptanthus. The flowers are very insignificant, but foliage is lovely, being of pinkish and bronzy tints especially when given plenty of light. Highly recommended for the window garden. \$1.00 ea.

Cryptanthus Bromeloides, var. Tricolor. One of the most colorful of the Cryptanthus. The leaves are variegated white and green, and in strong light it is stained pink and red, assuming a most charming color effect. The amount of color stain varies in direct proportion with the amount of light. \$2.50.

Guzmania minor. (Lingulata). Delicate green, very thin leaves, most brilliant red center during flowering. \$7.50.

Neoregelia carolinae (marechalii). Wide leaves which take on a rosy red coloring. \$7.50.

Neoregelia spectabilis. Called "Fingernail plant" because of the red tips of the metallic olive green leaves; gray crossbands beneath; blue flowers in low cushion. \$3.50.

Nidularum procureum var. purpureum. \$3.00.

Pitcairnia andreanum. \$3.00.

Tillandsia ionantha. A miniature plant of xerophytic habit. It is strictly an air plant and does not have to be planted except for convenience. In nature it grows on tree bark, rock or telegraph wire. The best method of handling is to plant in a very small pot of osmunda and set in full sunlight. Water the leaves occasionally. The two inch rough leaves are crowded together urn-shaped. When in flower the leaves turn red. The flowers are very large for the size of the plant, tubular in form and purple in color with yellow anthers at the tip. This is one of the finest plants we know of for a small sunny window garden. \$1.50.

Tillandsia lindeni. Gracefully curved pointed leaves with maroon lines deepening towards the base. The flattened ten inch flower spike is light pink with large blue flowers emerging alternately from the sides. Very long lasting. Some consider this the finest of all bromeliads. \$7.50 ea.

Quesnelia arvensis. This is a terrestrial plant and should be grown in the ground or a sandy soil mixture with peat added, if potted. The leaves are large and spiny. The bloom is erect, a brilliant shade of pink in a large closely packed umbel. Should be grown in open sunlight. Rare. \$5.00.

Q. liboniana. Light green foliage that is rather stiff in form. The flowers are stunningly different, being a combination of deep orange and blackish purple. \$1.50 ea.

Vriesia marie. "Painted Feather," hybrid larger than *carinata*, light green foliage tinted pink and showy, flattened, featherlike spike with bracts salmon-rose at base, and yellow dotted brown toward apex; yellow flowers. \$7.00.

V. carinata. A small growing plant with about six-inch spread, plain green shiny leaves. Red, yellow and green colors on a fan-like structure on end of a ten-inch stem. The color lasts a long time. Summer blooming. \$7.50.

V. splendens. Flaming Sword. A beautiful green plant with mahogany stripes. Flower spike tall, flat, and brilliant orange. Spectacular. Rare. Plant does not sucker like other Bromeliads but makes new plants in its own center. Small \$5.00.

Big 4 collection. Nutans, Distachia, Rubro-cyanea and Zebrina. Value \$3.50. Price \$3.25. We will send larger plants if you order them to come by express, f.o.b.

Special offer for Beginners. All labelled. 1 plant \$1.50. 5 for \$6.75. 10 for \$12.50. These are small plants many of the above included.